Kāhuna Kilo Moana - Oceanography & Marine Science

Kāhuna Kilo Moana observed and tracked ocean changes to thoroughly understand the patterns of biology and predict ocean conditions and food resources availability. They understood tidal patterns, wave heights, ocean currents, animal migrations, seasonal changes and the management decisions needed to sustain their consumption and relationship to the ocean.

Oceanographers attempt to understand the oceans – from the sea floor to ocean currents and all the biology that lives in between. The art of sailing & boating is the interpretation of physical, chemical and biological oceanography. The ocean affects our shorelines, weather, food resources and global climate change. Near-shore and off-shore resources are all integral parts of our lives from the food we eat to the temperature of the ocean that affects hurricanes and coastal currents.
Invasive Marine Biologist

Conducts and leads assessments of the impacts of invasive species introductions into coastal and marine environments. Formulates and conducts a research or non-research (scientific, engineering, economic, statistical, or social science-related) program of considerable scope and complexity under general guidance on policy, resources planning, producing reports or publications that will address or answer important question in the field and may direct a research team in all phases of the program.

Education
Bachelor’s or higher degree: biological sciences, agriculture, natural resource management, chemistry, or other related fields.

Skills & Experience
Experience with biogeographic assessment defining the impacts of invasive species on resident marine species and their associated habitats. Experience with habitat map using GIS and Remote Sensing Technologies.

Yearly Salary
$55,706.00

Projects in Hawaii
- Biological surveys
- Public Education
- Understanding species distribution, function and ecology

Employers
Government: Fish and Wildlife, National Park, Biological Resources Division, NOAA, Land and Natural Resources, Division of Aquatic Resources
Private: Ocean Transport, OHA, Oceanic Institute, Docks & Marinas
Non-Profits: The Nature Conservancy
Kilo Moana – Oceanography, Marine Science

Marine Conservation Analyst - GIS

Plan, oversee and facilitate activities related to improving access, analysis and management of coastal and marine ecosystems information, using GIS and/or other relational databases, to support management interventions in island members such as the development and management of marine protected areas/marine managed areas (MPAs/MMAs) and address issues of ecosystem conservation and sustainable management of coastal and marine resources.

Education

Environmental Science or Natural Resource Management with an emphasis on Spatial Analysis, preferably at post-graduate level (M.S or PhD)

Skills & Experience

Analysis and presentation of environment/natural resource data using relational databases

Yearly Salary
$34,288

Projects in Hawaii

- Biological surveys
- Public Education
- Understanding species distribution, function and ecology

Employers

Government: Fish and Wildlife, National Park, Biological Resources Division, NOAA, Land and Natural Resources, Division of Aquatic Resources
Private: Ocean Transport, OHA, Oceanic Institute, Docks & Marinas
Non-Profits: The Nature Conservancy

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Fisheries Technician

Transports whole bottomfish from dockside fishing vessels to the laboratory. Processes fish to obtain length and weight measurements. Extracts and labels specimens of tissues and bony hard parts. Records all measurement and extracted specimen data, properly labels, preserves, and stores specimens, and properly disposes of processed fish carcasses. Communicates with fishing captains to plan for timely transfer of bottomfish arriving from fishing vessels at dockside into coolers for timely transfer by pickup-truck to laboratory facility. Uses meter calipers, weight scales, meat saws, knives, scalpels, and forceps to measure, process and extract needed tissue and bony hard part samples. Performs daily data entry into spreadsheet to record vessel, species, length and weight measurements, sex, samples extracted, and other observations for each fish processed.

Education

Associate’s Degree or Technical certificate

Skills & Experience

One to three (1-3) years of experience in a laboratory environment with an emphasis on biological research. Experience in handling and processing fish.

Yearly Salary

$24,288

Projects in Hawaii

- Surveys of fisherman, commercial, recreational and subsistence.
- Understand fish population dynamics

Employers

Government: Fish and Wildlife, National Oceanic and Atmospheric Administration, Land and Natural Resources
Private: Fish auctions, Consulting firms
Non-Profits: The Nature Conservancy, Environmental Defense Fund
Water Safety Officer I

Performs as a trainee in a planned training program in water safety work; assists in making ocean rescues and administering emergency life support measures; learns and enforces ordinances, rules, and regulations governing beach activities and shore water usage; renders first aid in cases of injury; and performs other related duties as required.

Education

Equivalent to graduation from High school

Skills & Experience

Possession of a current American Red Cross Lifeguard Training with First Aid Certificate or equivalent, a current American Heart Association BLS for Healthcare Providers or American Red Cross Cardio-Pulmonary Resuscitation for the Professional Rescuer (CPR/PR) Certificate.
Kilo Moana – Oceanography, Marine Science

Permit Assistant

Assists in the receiving and processing of fisheries permit applications and issuance of fisheries permits on a timely basis, including bottomfish, longline, handline, troll, high seas fishing compliance act, coral reef, and crustacean, under the general supervision of the NMFS Sponsor. Updates permit databases, and generates periodic and ad hoc summaries and reports from databases providing updates to various staff for producing reports. Maintains and updates permit records and permit files. Prepares brief reports and summaries of permit related information. Interacts with fisherman and the public and provides customer service on a timely basis with a helpful and friendly attitude.

Education

Associates Degree or Equivalent

Skills & Experience

Up to one (0-1) year of experience working in an office environment, entering data into a database and processing applications or records. Experience with maintaining, classifying, and filing records, especially business or scientific records. Experience interacting positively with the public.

Yearly Salary

$21,558.0 – $33,492.00

Projects in Hawaii

- Fishery management
- Conservation programs

Employers

Government: US Fish and Wildlife Service, Pacific Islands Forestry, National Marine Fisheries Service, Division of Aquatic Resources

Private: Consulting firms
Water Quality Assessment Specialist

Plan and execute various water pollution control and water quality management research activities. Collect, organize, analyze, and interpret water quality assessment information for regulatory and educational purposes. Write and test Standard Operating Procedures (SOPs) for conducting various water quality assessment tasks. Develop and conduct Watershed Inventory Procedures to identify, map, and characterize threats to water quality in areas of concern. Conduct a systematic planning process that synthesizes Watershed Inventory results, data analysis, and multi-party work group recommendations.

Education

Bachelors Degree. Two to four (2-4) years of experience

Skills & Experience

2 years of experience working in an office environment, entering data into a database and processing applications or records. Experience with maintaining, classifying, and filing records, especially business or scientific records. Experience interacting positively with the public.

Yearly Salary

$21,558.0 - $33,492.00

Projects in Hawaii

- Biological surveys
- Public Education
- Outreach events
- Understanding water demand and run-off pollution

Employers

Government: Department of Health, National Park, Biological Resources Division, NOAA, Division of Aquatic Resources

Private: Land Owners, Oceanic Institute, Aquaculture Companies

Non-Profits: The Nature Conservancy, Environmental Organizations

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Marine Ecosystems Specialist

Support marine ecosystem research and conservation efforts, including surveys of fishes, corals, algae, invertebrates, marine debris, oceanographic conditions, and benthic habitats. Process, analyze, and summarize data from various coral reef research surveys and conservation projects. Prepares and analyzes summary statistics, presentation graphics, and reports of coral reef research and monitoring efforts. Participates in research cruises and marine ecosystem surveys to assess, monitor and mitigate threats to the coral reef ecosystems of the U.S. Pacific Islands. Prepares scientific reports for publication and presentation.

Education

Bachelors Degree from an accredited four (4) year college or university in Marine Biology, Zoology, Biology, Botany, Ecosystem Science, Oceanography, GIS, Computer Sciences, Ocean Engineering, or related field involving studies of marine science or coral reef ecosystems.

Skills & Experience

One to three (1-3) years of experience with marine research projects

Yearly Salary

$31,284.00

Projects in Hawaii

- Biological surveys
- Public Education
- Outreach events
- Understanding Ecosystem Processes

Employers

Government: National Park, Biological Resources Division, NOAA, National Marine Fisheries Service, Division of Aquatic Resources
Private: Consulting Firms
Non-Profits: The Nature Conservancy, Environmental Organizations
Assistant Professor of Marine Science

Teach undergraduate and MS level graduate courses on campus and on board the department’s research vessels, including: undergraduate Oceanography lecture and laboratory, Coastal and/or Pelagic Methods and Analyses, Biological Oceanography, undergraduate and graduate courses in the applicant’s specialty; participate in summer courses as desired for additional compensation; conduct research and publish results on biological oceanography, mentor undergraduate and graduate student research, seek extramural research funding; advise students; participate in departmental, community, and university service.

Education

PhD from an accredited college or university in a biological or oceanographic discipline.

Skills and Experience

Research experience with plankton and their interactions with both chemical and physical factors in coastal and marine environments, relevant publications, and demonstrated expertise in teaching at the university level.

Yearly Salary

$57,890.00

Projects in Hawaii

- Biological surveys
- Public Education
- Outreach events
- Understanding Ecosystem Processes

Employers

Government: University of Hawaii campuses
Private: Hawaii Pacific University, Chaminade, Brigham Young University
Non-Profits: The Nature Conservancy, Environmental Organizations

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Naturalist

Passionate, energetic, and knowledgeable ocean enthusiasts with excellent communication and customer service skills as well as a great attitude. Give public presentations, have great interpretive skills and be well versed in Hawaiian marine science/biology/culture. Interact with visitors to promote understanding, awareness, and respect for the natural and cultural resources and the recreational opportunities through one-to-one discussions promoting a safe visit/tour and resource conservation.

Education

High School Diploma. Advanced education helpful

Skills and Experience

Public Speaking, Knowledgeable in Hawaiian culture and marine science.

Yearly Salary

$27,890.00

Projects in Hawaii

- Marine Science Lectures
- Public Education
- Outreach events
- Community events and School curriculum

Employers

Government: City and County Recreational Divisions, Division of Aquatic Resources, University outreach efforts
Private: Aquariums and Hotels
Non-Profits: The Nature Conservancy, Environmental Organizations, Community Groups
Scientific Data Analyst

A background in marine science, and demonstrated abilities in the integration and analysis of environmental data. Interdisciplinary knowledge of marine sciences including biology, physics, and chemistry is required. Knowledge of some subset of the following is desirable: marine mammals, fisheries science, coral reef ecology, ornithology, monitoring statistics and data visualization. Support data management, processing, analysis and interpretation.

Education

Masters Degree in a marine related scientific area or in statistics.

Skills and Experience

Data management, data extraction, quality assurance and documentation development. 2-4 years of experience helpful.

Yearly Salary

$60,000.00

Projects in Hawaii

- Biological surveys
- Scientific Publications
- Outreach events
- Understanding Ecosystem Processes

Employers

Government: National Park, Biological Resources Division, NOAA, National Marine Fisheries Service, Division of Aquatic Resources, University Research

Private: Consulting Firms
Non-Profits: The Nature Conservancy, Environmental Organizations
Marine Biology Community Education

Develop and implement informal education programs that support the goal of increasing marine science literacy in Hawaii. Content will focus on marine science and the environment and incorporate the research and education projects of the University of Hawaii. Responsibilities and primary functions include: develop and instruct marine science education activities for a range of audiences that include the general public, elementary to college-age students, families, and subject-area professionals. Serve as an information science resource for the public on marine science questions and research.

Education

Masters Degree from a college or university with major coursework in marine sciences, oceanography, marine education, biology or related field.

Skills and Experience

At least 3 years of progressively responsible professional experience in marine, environmental and/or science education in an aquarium, science center, museum or other community-based setting. Knowledge of education methods, materials and Hawaiian marine natural history, biology and ecology of aquatic organisms.

Yearly Salary

$45,000-$51,000.00

Projects in Hawaii

- Coconut Island Tours
- Outreach events
- Teacher Workshops
- School field trips
- Summer programs

Employers

Government: National Park, Biological Resources Division, NOAA, Division of Aquatic Resources, Hawaii Institute of Marine Biology
Private: After-school & summer programs, Schools
Non-Profits: The Nature Conservancy, Environmental Organizations